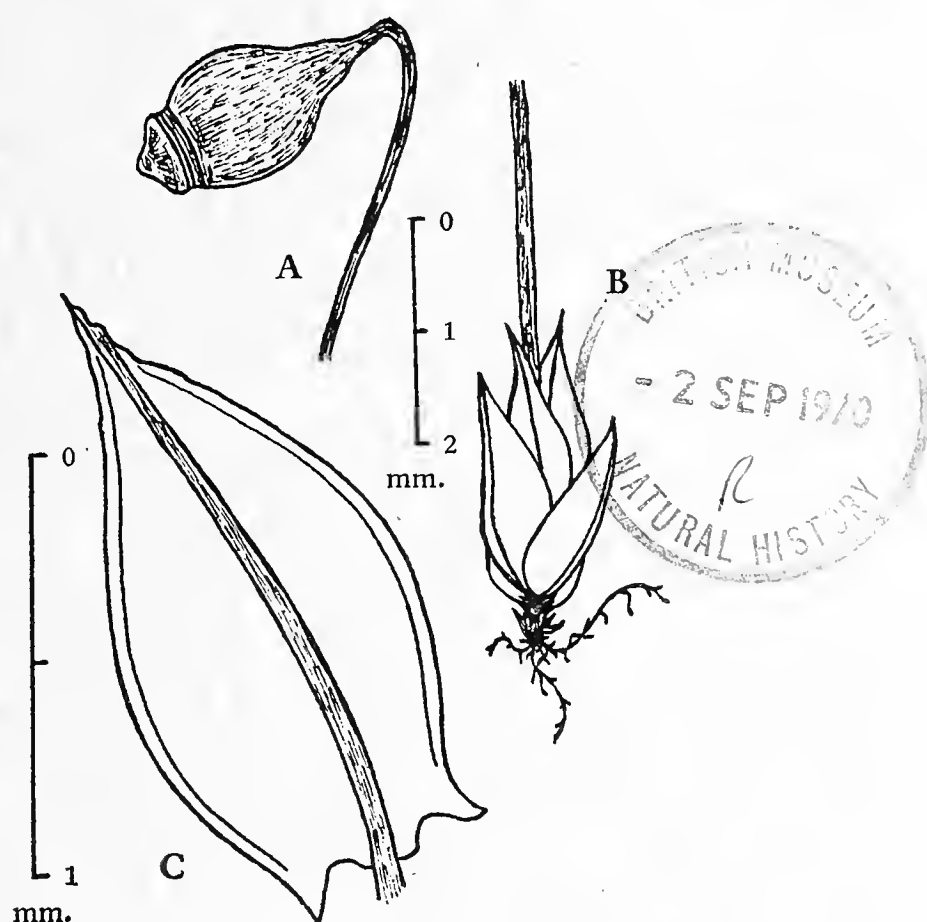


A BRYOPHYTE CHECK-LIST FOR LINCOLNSHIRE



M. R. D. SEAWARD M.Sc.

*Lincolnshire Natural History Brochure
No. 4*

*Published by
LINCOLNSHIRE NATURALISTS' UNION
LINCOLN*

COVER PLATE

Bryum mamillatum Lindb. — one of Lincolnshire's bryophyte rarities; known only from Norfolk and Lancashire besides the several localities between Clee-thorpes and Saltfleetby.

A=sporogonium; B=entire plant; C=perichaetial leaf.

Drawings on front cover made by the author from material collected by G. H. Allison from Saltfleetby sand dunes, June 1925 (Herb. M. R. D. Seaward).

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FOR
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by

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Trinity and All Saints' Colleges

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‘A BRYOPHYTE CHECK-LIST FOR LINCOLNSHIRE’

71/2 *Orthodontium lineare* add 15
77/25 *Bryum argenteum* var. *lanatum* add 16
77/28 *B. rubens* add 9
98/5 *Orthotrichum affine* add 2; substitute '1877,
 Parsons' for '1878, Lees'
131/2 *Drepanocladus sendtneri* add 15

10/13 Substitute '*R.cavernosa* Hoffm. (418) 1905, Reeves.
 (7), 14.' for '*R.crystallina* L. (418) 1905,
 Reeves. 7'

71/1 *Radula complanata* add 16

M.R.D. Seaward/May 1970



PART I: MOSSES

Various attempts have been made during the past ninety years to furnish the county with a 'Bryophyte Flora'. Considerable data have been assembled during that period, especially by Lees, Larder, Stow and Allison, but published lists are meagre. Lees published his *Outline Flora* in 1892; the data for which, he accumulated during his stay in the Market Rasen area from 1877 to 1879 (see: Seaward, 1967a; 1968b). Larder collected mainly in the Louth area from 1892 to 1893, and published the first part to a 'Cryptogamic Flora' in 1898; it was never completed. Miss Stow continued to add to the local registers, and published her records between 1900 and 1906.

Allison (ably assisted by several naturalists in the Grimsby area, especially Marshall — see: Seaward, 1962b; 1964a), after twenty years of bryological work in the county, published a 'Lincolnshire Moss List' in the *Lincolnshire Naturalists' Union Transactions* during the years 1931 and 1932. Allison continued to add to these records for a further twenty years, but very few of these records were published, or indeed verified.

Bryological collections in Lincolnshire have been very limited, and although numerous specimens have been located in various herbaria scattered throughout the British Isles (see p. 10), the majority of material is to be found in the herbaria of the City and County Museum, Lincoln, the Cartwright Hall, Bradford and the writer.

During the past ten years the writer has been able to work on these collections, and reports of this work, together with recent bryological records, may be found in the *Lincolnshire Naturalists' Union Transactions*, *The Naturalist* and the *Transactions* of the *British Bryological Society*. More specific references relating to the writer's work on the taxonomy, distribution and ecology of particular Lincolnshire genera/species are as follows:

<i>Amblystegium</i> , <i>Campylium</i> , <i>Hygroamblystegium</i> , <i>Leptodictyum</i>	1966a
<i>Atrichum</i>	1965; 1968c
<i>Bryum</i>	1965; 1967b
<i>Cratoneuron</i>	1964d; 1966a
<i>Drepanocladus</i>	1961b; 1964b
<i>Hypnum</i>	1961b; 1968a
<i>Neckera</i> , <i>Philonotis</i> , <i>Rhacomitrium</i> , <i>Ulota</i>	1967b
<i>Orthotrichum</i> , <i>Pohlia</i> , <i>Pottia</i> , <i>Thuidium</i> , <i>Tortula</i>	1961b
<i>Plagiothecium</i> , <i>Rhodobryum</i>	1965
<i>Polytrichum</i>	1969b
<i>Sphagnum</i>	1961c; 1962a; 1963a

The check-list follows the pattern set by Peacock in his 'Check-list of Lincolnshire Plants' (*Lincs. Nat. Union Trans.*, 1909). The county is divided into two vice-counties, each of which is sub-divided into divisions (see map p. 12): North Lincolnshire (V.C. 54) contains division numbers 1 to 12, and South Lincolnshire (V.C. 53) contains division numbers 13 to 18 (for further details see: *The Naturalist*, 1895, 289-301). The true ecological nature of a particular species is, however, rarely manifested by its divisional distribution, since divisions are based on parishional rather than ecological boundaries. Sometimes a general pattern can be deduced, *e.g.*, littoral species occur in divisions 3, 4, 9, 12, 17 and 18. Further information on the value of the Lincolnshire natural history recording units, together with details of their size and the attention given to them by bryologists in the past, is to be found elsewhere (see: Seaward, 1964c). Divisional numbers in the check-list which appear in parentheses are for good records, in many cases supported by herbarium material and, or published data, but there is a strong reason to believe that they no longer occur there.

For a general account of the geology and soils of Lincolnshire one is referred to Swinnerton and Kent (1949) and Straw (1969) respectively. An interesting account of Lincolnshire topography past and present is provided in the introductory chapter of Smith and Cornwallis (1955). Published data for ecological work in Lincolnshire is minimal, despite the efforts of Peacock at the turn of this century who was described by some as the 'father of ecology'. Peacock's rock-soil flora for the county was never published, but the manuscripts, now housed in the Botany School of Cambridge University, provide the researcher with a wealth of ecological information. It is pleasing to note that the reserves of the Lincolnshire Trust for Nature Conservation, in particular Gibraltar Point, have received the ecological attention they deserve in more recent years. Although ecological accounts are few, one is referred to the numerous papers, presidential addresses, sectional officers' reports and field meeting reports which have appeared in *The Naturalist* and the *Lincolnshire Naturalists' Union Transactions* over the past seventy-five years.

The nomenclature (in most cases) and preceding index number are according to Warburg (1963). The index number, composed of generic and specific references, has been used in the compilation of the Lincolnshire herbarium at the City and County Museum, Lincoln. It is hoped therefore that this check-list will prove an asset to future researchers of that collection. The figure which appears in parentheses and follows immediately after the nomenclature is the local register reference number. A comprehensive list of herbaria, manuscripts and book/journal references consulted appears at the end of the check-list.

SPHAGNALES

1/1	<i>Sphagnum palustre</i> L. (372) 1815, Peck.	1 — 3, 5, 7, 10, 13.
1/4	<i>S. papillosum</i> Lindb. (373) 1877, Lees.	1, 2, 5, 7, 10 (13).
1/5	<i>S. compactum</i> DC. (374) 1878, Lees.	5, 7, 10.
1/8	<i>S. squarrosum</i> Pers. ex Crome (380) 1926, Allison.	2, 5 — 7, 10, 13, 15, 16.
1/12	<i>S. recurvum</i> P. Beauv. (381) 1892, Peacock & Davy.	1 — 3, 5, 7, 8, 15.
1/15	<i>S. tenellum</i> Pers. (387) 1958, Rose.	5.
1/16	<i>S. cuspidatum</i> Ehrh. (378) 1877, Lees.	1, 2, 5, 7.
1/18	<i>S. subsecundum</i> Nees	
	var. <i>subsecundum</i> (379) 1877, Lees.	1, 2, 5, 7, 10, 13.
	var. <i>inundatum</i> (Russ.) C. Jens. (386) 1877, Lees.	1 — 3, 5, 7, 10.
	var. <i>auriculatum</i> (Schimp.) Lindb. (389) 1878, Lees.	1 — 3, 5, 7, 13.
1/19	<i>S. fimbriatum</i> Wils. (382) 1878, Lees.	1 — 3, 5, 7, 10, 13, 15, 16.
1/20	<i>S. girgensohnii</i> Russ. (390) 1960, Seaward.	13.
1/25	<i>S. capillaceum</i> (Weiss) Schrank (383) 1877, Lees.	1, 2, 7, 10, (13).
1/27	<i>S. plumulosum</i> Röhl (384) 1910, Stow.	1, 2, 5, 10, 13.

POLYTRICHALES

3/2	<i>Atrichum undulatum</i> (Hedw.) P. Beauv. (153) 1858, Bogg.	1 — 8, 10, 11, 13 — 16.
	var. <i>minus</i> (Hedw.) Paris (164) 1931, Allison.	5.
5/1	<i>Polytrichum nanum</i> Hedw. (165) 1904, Hawley.	(7), (10).
5/2	<i>P. aloides</i> Hedw. (166) 1877, Lees.	2, 3, 7, 10, 13.
5/3	<i>P. urnigerum</i> Hedw. (167) 1877, Allen.	7, 10, 15.
5/6	<i>P. piliferum</i> Hedw. (168) 1877, Lees.	1 — 3, 5, 7, 10, 13, 15, 16.
5/7	<i>P. juniperinum</i> Hedw. (169) 1877, Lees.	1 — 8, 10, 13 — 16.
5/9	<i>P. aurantiacum</i> Sw. (170) 1898, Fowler.	1 — 3, 5, 7, 10, 13, (15).
5/10	<i>P. formosum</i> Hedw. (171) 1880, Fowler.	1 — 7, 10, (13).
5/11	<i>P. commune</i> Hedw. (172) 1815, Peck.	1 — 3, 5 — 8, 10 — 16.
	var. <i>perigoniale</i> (Michx.) B. & S. (173) 1899, Hudson.	1, 7.

FISSIDENTALES

8/1	<i>Fissidens viridulus</i> Wahl. (174), incl. var. <i>lylei</i> Wils. (175) 1899, Fisher.	3, 4, 8, 10, 11, 13, 15, 17.
8/3	<i>F. minutulus</i> Sull. (176) 1900, Stow.	(10), 15.

8/4	<i>F. bryoides</i> Hedw. (177) 1877, Lees.	2 — 4, 6 — 8, 10, 11, 13 — 16.
8/5	<i>F. incurvus</i> Starke ex Web. & Mohr (178) 1898, Fisher.	4, 6, 9, 14 — 16, 18.
8/7	<i>F. crassipes</i> Wils. (402) 1961, Monk.	10, 16.
8/12	<i>F. exilis</i> Hedw. (179) 1899, Stow.	1, 4, 7, 8, 10, 11, 13, 15, 16.
8/15	<i>F. taxifolius</i> Hedw. (180) 1877, Lees.	2 — 11, 13 — 18.
8/16	<i>F. cristatus</i> Wils. (181) 1877, Fowler.	2, 10, 15, 16.
8/17	<i>F. adianthoides</i> Hedw. (182) 1877, Lees.	1 — 5, 7, 8, 10, 13 — 16.

DICRANALES

10/1	<i>Archidium alternifolium</i> (Hedw.) Mitt. (399) 1914, Reader.	10.
11/1	<i>Pleuridium acuminatum</i> Lindb. (183) 1904, Hawley.	2, 4, 8, 9, 11, 14, 15.
11/2	<i>P. subulatum</i> (Hedw.) Lindb. (184) 1899, Stow.	4, 8, 10, 13, 15.
12/7	<i>D. flexicaule</i> (Schwaegr.) Hampe (186) 1878, Lees.	2, 9, 10, 13 — 15.
15/1	<i>Ceratodon purpureus</i> (Hedw.) Brid.	
	var. <i>purpureus</i> (154) 1877, Lees.	1 — 17.
	var. <i>conicus</i> (Hampe) Husn. (385) 1912, Fisher.	15.
17/2	<i>Seligeria pusilla</i> (Hedw.) B., S. & G. (187) 1892, Larder.	2, 8, 15.
17/5	<i>S. paucifolia</i> (Dicks.) Carruth. (188) 1904, Stow.	3, 4, 8, 11.
17/6	<i>S. calcarea</i> (Hedw.) B., S. & G. (189) 1904, Hawley.	3, 4, 8, 11.
21/1	<i>Pseudephemerum nitidum</i> (Hedw.) Reim. (190) 1926, Allison.	2, 16.
22/2	<i>Dicranella schreberana</i> (Hedw.) Dix. (162) 1896, Thornley.	2.
22/4	<i>D. varia</i> (Hedw.) Schimp. (161) 1878, Lees.	2 — 4, 7, 8, 10, 13 — 17.
22/8	<i>D. cerviculata</i> (Hedw.) Schimp. (160) 1878, Parsons.	2, 5, 7, 10.
22/9	<i>D. heteromalla</i> (Hedw.) Schimp. (159) 1877, Lees.	1 — 8, 10, 11, 13 — 16, 18.
27/1	<i>Dicranoweissia cirrata</i> (Hedw.) Lindb. (163) 1877, Lees.	1 — 8, 10, 13, 15, 16, 18.
29/5	<i>Dicranum montanum</i> Hedw. (191) 1910, Allison.	4.
29/11	<i>D. majus</i> Sm. (192) 1877, Lees.	7, 8, 10, 13, (16).
29/12	<i>D. bonjeanii</i> De Not. (193) 1877, Lees.	1 — 3, 5 — 7, 10.
29/13	<i>D. scoparium</i> Hedw. (195) 1815, Peck.	1 — 8, 10, 11, 13 — 16.
	var. <i>paludosum</i> Schimp. (196) 1880, Fowler.	11, 13.
29/14	<i>D. polysetum</i> Michx. (197) 1914, Marshall.	7.
29/16	<i>D. spurium</i> Hedw. (198) 1886, Marchioness of Huntly.	5, 7, 10.
31/4	<i>Campylopus fragilis</i> (Brid.) B., S. & G. (152) 1877, Lees.	1, 2, 7, 10.
31/5	<i>C. pyriformis</i> (Schultz) Brid. (151) 1877, Lees.	1 — 5, 7, 8, 10, 13, 15, 16.
31/6	<i>C. flexuosus</i> (Hedw.) Brid. (150) 1877, Lees.	1, 4, 5, 7, 10, 13 — 15.
33/1	<i>Leucobryum glaucum</i> (Hedw.) Schimp. (199) 1877, Lees.	1 — 3, 5, 7, 10, 13.

POTTIALES

34/2	<i>Encalypta vulgaris</i> Hedw. (200) 1878, Fowler.	2, 5 — 8, 14, 15.
34/5	<i>E. streptocarpa</i> Hedw. (201) 1877, Fowler.	2, 5, 7, 8, 13 — 16.
35/1	<i>Tortula ruralis</i> (Hedw.) Crome (202) 1877, Lees.	1 — 11, 13 — 18.
35/2	<i>T. ruraliformis</i> (Besch.) Rich. & Wall. (204) 1901, Mason,	2, 9, 11, 18.
35/4	<i>T. intermedia</i> (Brid.) Berk. (205) 1878, Lees.	1, 2, 7, 8, 11, 13, 15, 16, 18.
35/6	<i>T. laevipila</i> (Brid.) Schwaegr. (206) 1880, Fowler.	3, 4, 6, 8 — 16.
	var. <i>laevipiliformis</i> (De Not.) Limpr. (392) 1931, Allison.	11.
35/8	<i>T. papillosa</i> Wils. ex Spruce (207) 1898, Stow.	5, 9 — 11, 13 — 15.
35/9	<i>T. latifolia</i> Hartm. (208) 1898, Stow.	4, 6, 10, 11, 13, 15.
35/10	<i>T. subulata</i> Hedw. (209) 1877, Lees.	2 — 4, 7 — 11, 13, 15, 16.
	var. <i>angustata</i> (Wils.) Limpr. (210) 1911, Marshall.	4, 8, 9.
35/12	<i>T. muralis</i> Hedw. (211) 1877, Lees.	1 — 18.
	var. <i>aestiva</i> Hedw. (212) 1901, Stow,	8, 13.
	var. <i>rupestris</i> Schultz (203) 1912, Marshall.	2.
35/15	<i>T. vahliana</i> (Schultz) Wils. (213) 1911, Marshall.	4.
36/2	<i>Aloina rigida</i> (Hedw.) Limpr. (214) 1933, Allison.	5, 8, 15.
36/3	<i>A. ambigua</i> (B. & S.) Limpr. (215) 1880, Fowler.	2, 4, 5, 8, 10, 13 — 15.
36/4	<i>A. aloides</i> (Schultz) Kindb. (216) 1880, Fowler.	2, 4, 8, 9, 11, 13 — 15.
38/1	<i>Pterygoneurum ovatum</i> (Hedw.) Dix. (217) 1878, Lees.	1, 2, 4, 5, 8, 9, 13 — 15.
38/2	<i>P. lamellatum</i> (Lindb.) Jur. (218) 1899, Stow.	13 — 15.
40/1	<i>Pottia lanceolata</i> (Hedw.) C. Müll. (219) 1892, Larder.	2 — 4, 8, 9, 11, 13, 15.
40/3	<i>P. heimii</i> (Hedw.) Fühnr. (220) 1880, Carr.	4, 9, 11.
40/4	<i>P. intermedia</i> (Turn.) Fühnr. (221) 1877, Lees.	4, 7, 8, 10.
40/5	<i>P. truncata</i> (Hedw.) Fühnr. (222) 1877, Lees.	2, 4, 7 — 11, 13 — 15, 17.
40/9	<i>P. davalliana</i> (Sm.) C. Jens. (223) 1865, Hutton.	4, 6, 8, 9, 11, 13 — 16.
40/11	<i>P. starkeana</i> (Hedw.) C. Müll. (224) 1909, Allison.	4, 9.
	var. <i>brachyodus</i> Wils. 1911, Marshall.	4.
40/12	<i>P. bryoides</i> (Dicks.) Mitt. (225) 1899, Stow.	4, 8, 13 — 15.

40/13	<i>P. recta</i> (Sm.) Mitt. (226) 1898, Mason.	4, 8, 13.
41/1	<i>Phascum curvicolium</i> Hedw. (227) 1912, Marshall.	1, 4, 8, 9, 14, 15.
41/2	<i>P. cuspidatum</i> Hedw. (228) 1878, Fowler.	1 — 4, 6 — 8, 10, 13 — 18.
	var. <i>piliferum</i> (Hedw.) Hook & Tayl. (229) 1913, Allison.	4.
41/3	<i>P. floerkeanum</i> Web. & Mohr (230) 1912, Allison.	4.
42/1	<i>Acaulon muticum</i> (Hedw.) C. Müll. (231) 1934, Allison.	4.
43/1	<i>Cinclidotus fontinaloides</i> (Hedw.) P. Beauv. (155) 1877, Lees.	5, 7.
43/3	<i>C. mucronatus</i> (Brid.) Mach. (232) 1918, Noel.	8.
44/1	<i>Barbula convoluta</i> Hedw. (119) 1878, Fowler.	1 — 7, 11, 13 — 18.
44/2	<i>B. unguiculata</i> Hedw. (120) 1858, Bogg.	2 — 11, 13 — 18.
	var. <i>cuspidata</i> (Schultz) Brid. (121) 1902, Stow.	13.
44/3	<i>B. revoluta</i> Brid. (118) 1878, Parsons.	2, 4, 14, 15, 18.
44/4	<i>B. hornschurchiana</i> Schultz (117) 1897, Mason.	4 — 6, 14.
44/6	<i>B. acuta</i> (Brid.) Brid. (233), incl. var. <i>viridis</i> (B. & S.) Rich. & Wall (234) 1933, Allison.	1, 6, 14, 15.
44/7	<i>B. fallax</i> Hedw. (113) 1877, Lees.	1 — 18.
44/8	<i>B. reflexa</i> (Brid.) Brid. (236) 1933, Allison.	15.
44/12	<i>B. rigidula</i> (Hedw.) Milde (114) 1878, Parsons.	(1), (2), 15.
44/14	<i>B. trifaria</i> (Hedw.) Mitt. (110) 1898, Preston.	4, 8, 10, 11, 14 — 16.
44/16	<i>B. tophacea</i> (Brid.) Mitt. (112) 1878, Parsons.	2, 4, 7 — 9, 11, 13, 15.
44/17	<i>B. cylindrica</i> (Tayl.) Schimp. (115) 1901, Mason.	8, 10, 11, 15.
44/18	<i>B. vinealis</i> Brid. (235) 1933, Allison,	5, 6.
44/20	<i>B. recurvirostra</i> (Hedw.) Dix. (111) 1877, Lees.	1, 2, 4, 7 — 10, 13 — 17.
46/1	<i>Gyroweissia tenuis</i> (Hedw.) Schimp. (391) 1911, Marshall.	4.
47/1	<i>Eucladium verticillatum</i> (With.) B., S. & G. (238) 1878, Fowler.	7, 15.
49/2	<i>Tortella tortuosa</i> (Hedw.) Limpr. (239) 1879, Fowler.	2, 8, 13 — 15.
49/4	<i>T. inclinata</i> (Hedw. f.) Limpr. (352) 1948, Rose.	14, 15.
49/6	<i>T. flavovirens</i> (Bruch) Broth. (240) 1912, Marshall.	4, 9.
51/3	<i>Trichostomum sinuosum</i> (Mitt.) Lindb. ex Herzog (116) 1963, Seaward.	14.
51/4	<i>T. crispulum</i> Bruch (241) 1933, Allison.	14, 15.
51/5	<i>T. brachydontium</i> Bruch (242) 1948, Rose.	5, 15.
52/1	<i>Weissia controversa</i> Hedw. (243) 1877, Lees.	2 — 4, 7 — 11, 13 — 16.
52/6	<i>W. microstoma</i> (Hedw.) C. Müll. (244) 1893, Larder.	4, 5, 8.
52/11	<i>W. crispa</i> (Hedw.) Mitt. (245) 1899, Stow.	4, 8, 10, 13, 15, 16.

GRIMMIALES

55/2	<i>Grimmia apocarpa</i> Hedw. (246) 1876, Parsons.	2 — 4, 7, 10, 14 — 16.
55/20	<i>G. pulvinata</i> (Hedw.) Sm. (247) 1878, Lees.	1 — 18.
55/24	<i>G. trichophylla</i> Grev. (248) 1878, Fowler.	2, 3.
56/7	<i>Racomitrium canescens</i> (Hedw.) Brid. (249) 1854, Fowler.	1, 2.
56/8	<i>R. lanuginosum</i> (Hedw.) Brid. (401) 1854, Fowler.	(2).

FUNARIALES

58/1	<i>Funaria hygrometrica</i> Hedw. (250) 1878, Lees.	1 — 18.
58/4	<i>F. fascicularis</i> (Hedw.) Schimp. (251) 1902, Stow.	(13).
59/1	<i>Physcomitrium pyriforme</i> (Hedw.) Brid. (252) 1878, Lees.	1, 2, 4, 7, 8, 10, 13, 15.
60/1	<i>Physcomitrella patens</i> (Hedw.) B., S. & G. (253) 1913, Marshall.	4.
62/1	<i>Ephemerum recurvifolium</i> (Dicks.) Boul. (254) 1930, Allison.	4, 8.
62/6	<i>E. serratum</i> (Hedw.) Hampe (255) 1922, Allison.	4, 8, 11.
65/2	<i>Tetraplodon mnioides</i> (Hedw.) B. & S. (256) 1892, Larder,	5, 8.

TETRAPHIDALES

69/1	<i>Tetraphis pellucida</i> Hedw. (257) 1877, Lees.	3, 5, 7, 8, 10, 11, 13.
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EUBRYALES

71/2	<i>Orthodontium lineare</i> Schwaegr. (258) 1934, Allison.	1 — 5, 7, 10 — 13.
72/1	<i>Leptobryum pyriforme</i> (Hedw.) Wils. (259) 1892, Larder.	4, 9, 10, 11, 14.
73/5	<i>Pohlia nutans</i> (Hedw.) Lindb. (260) 1878, Lees.	1 — 5, 7, 8, 10, 13 — 16.
73/9	<i>P. rothii</i> (Correns) Broth. (261) 1911, Allison.	2.
73/11	<i>P. annotina</i> (Hedw.) Loeske. (262) 1892, Peacock & Davy.	2.
73/14	<i>P. wahlenbergii</i> (Web. & Mohr) Andr. (263) 1876, Parsons.	2 — 4, 9, 10, 15.
73/15	<i>P. delicatula</i> (Hedw.) Grout (264) 1878, Parsons.	2 — 4, 8, 10, 16.
77/1	<i>Bryum marratii</i> Wils. (266) 1919, Allison.	4, 9.

77/2	<i>B. warneum</i> (Röhl.) Bland. ex Brid. (267) 1910, Allison.	4, 9.
77/3	<i>B. mamillatum</i> Lindb. (268) 1919, Allison.	4, 9.
77/4	<i>B. pendulum</i> (Hornsch.) Schimp. (134) 1878, Lees.	4, 7 — 9, 11.
77/7	<i>B. knowltonii</i> Barnes (135) 1899, Mason.	4, 9, 11.
77/8	<i>B. inclinatum</i> (Brid.) Bland. (269) 1904, Hawley.	2, 4, 9, 10.
77/12	<i>B. uliginosum</i> (Brid.) B. & S. (136) 1898, Stow.	(14).
77/13	<i>B. pallens</i> Sw. (137) 1878, Parsons.	1, 4, 5, 9, 10, 15, 16.
77/19	<i>B. pseudotriquetrum</i> (Hedw.) Schwaegr. (139) 1877, Fowler.	1, 2, 4 — 7, 9, 15 — 17.
	var. <i>bimum</i> (Brid.) Lilj. (138) 1899, Mason.	2 — 5, 10, 11, 16.
77/22	<i>B. intermedium</i> (Brid.) Bland. (140) 1898, Stow.	2, 4, 6, 9, 10, 13.
77/23	<i>B. caespiticium</i> Hedw. (141) 1815, Peck.	1 — 18.
77/25	<i>B. argenteum</i> Hedw. (146) 1878, Parsons.	1 — 18.
	var. <i>lanatum</i> (P. Beauv.) Hampe (147) 1900, Stow.	13, 15, 17.
77/26	<i>B. bicolor</i> Dicks. (272) 1877, Lees.	3, 4, 7 — 10, 12, 15 — 18.
	var. <i>gracilentum</i> Tayl. ex Braithw. (273) 1912, Marshall.	4.
77/27	<i>B. radiculosum</i> Brid. (274) 1923, Holderness.	11, 13.
77/28	<i>B. erythrocarpum</i> agg. (145) 1904, Hawley.	1 — 6, 10, 13, 15 — 17.
	<i>B. microerythrocarpum</i> C. Müll. & Kindb. (405) 1930, Allison.	5, 15.
	<i>B. rubens</i> Mitt. (403) 1945, Allison.	1 — 4, 6, 13, 15 — 17.
	<i>B. ruderae</i> Crundw. & Nyh. (406) 1928, Allison.	4, 15.
	<i>B. klinggraeffii</i> Schimp. (404) 1962, Whitehouse.	2, 13, 15.
	<i>B. violaceum</i> Crundw. & Nyh. (407) 1962, Whitehouse.	15.
77/36	<i>B. donianum</i> Grev. (144) 1898, Stow.	13, 15.
77/37	<i>B. capillare</i> Hedw. (142) 1877, Lees.	1 — 18.
	var. <i>torquescens</i> (Bruch ex De Not.) Husn. (275) 1910, Allison.	3, 4.
	var. <i>rosulatum</i> Mitt. (143) 1898, Mason & Gasking.	3.
77/38	<i>B. obconicum</i> Hornsch. (276) 1912, Marshall.	2, 10.
78/1	<i>Rhodobryum roseum</i> (Hedw.) Limpr. (148) 1901, Peacock.	2, 3.
79/1	<i>Mnium hornum</i> Hedw. (277) 1877, Lees.	1 — 8, 10 — 16.
79/4	<i>M. marginatum</i> (With.) P. Beauv. (278) 1877, Lees.	7, (11), (13).
79/6	<i>M. stellare</i> Hedw. (279) 1904, Hawley.	4, 10.
79/7	<i>M. cuspidatum</i> Hedw. (280) 1892, Surtees.	(10), 14.
79/9	<i>M. longirostrum</i> Brid. (281) 1877, Lees.	2 — 8, 10, 11, 13 — 16.
79/10	<i>M. affine</i> Bland. (282) 1896, Thornley.	3, 6, 10.
79/12	<i>M. seligeri</i> (Lindb.) Limpr. (283) 1912, Marshall.	4, 10, 13.
79/13	<i>M. undulatum</i> Hedw. (284) 1877, Lees.	1 — 8, 10 — 17.
79/14	<i>M. punctatum</i> Hedw. (285) 1877, Lees.	1, 2, 4, 5, 7, 8, 10, 12 — 16.
81/1	<i>Aulacomnium palustre</i> (Hedw.) Schwaegr. (107) 1815, Peck.	1 — 3, 5, 7, 10, 13 — 16.
	var. <i>imbricatum</i> B. & S. (108) 1892, Peacock.	2.
81/3	<i>A. androgynum</i> (Hedw.) Schwaegr. (109) 1877, Lees.	1 — 5, 7, 10, 13 — 16.
87/2	<i>Bartramia pomiformis</i> Hedw. (122) 1877, Lees.	7, 10, (11), (14).
90/2	<i>Philonotis fontana</i> (Hedw.) Brid. (286) 1815, Peck.	1, 3, 5, (6), 7, 10, (15), (16).
90/6	<i>P. calcarea</i> (B. & S.) Schimp. (287) 1880, Fowler.	(13).
91/1	<i>Breutelia chrysocoma</i> (Hedw.) Lindb. (133) 1877, Lees.	(7 — extinct before 1895).

ISOBRYALES

97/1	<i>Zygodon viridissimus</i> (Dicks.) R. Br. (288) 1877, Lees.	1 — 4, 6 — 11, 13 — 16, 18.
98/2	<i>Orthotrichum anomalum</i> Hedw. (289), incl. var. <i>saxatile</i> (Wood) Milde (290) 1876, Parsons.	1 — 3, 7 — 9, 11, 13 — 17.
98/3	<i>O. cupulatum</i> Brid. (291) 1913, Bullock.	4, 8, 11.
98/5	<i>O. affine</i> Brid. (292) 1878, Lees.	4, 7, 8, 10, 11, 13 — 16.
98/8	<i>O. lyellii</i> Hook. & Tayl. (293) 1898, Stow.	4, 7, 10, 11, 13 — 16.
98/15	<i>O. pulchellum</i> Brunton (295) 1910, Allison.	4, 9.
98/16	<i>O. diaphanum</i> Brid. (296) 1878, Parsons.	2 — 4, 6, 8 — 11, 13 — 17.
99/1	<i>Ulota phyllantha</i> Brid. (297) 1911, Marshall.	4, 9.
99/3	<i>U. crispa</i> (Hedw.) Brid. (298) 1877, Lees.	4, 7.
99/5	<i>U. bruchii</i> Hornsch. ex Brid. (299) 1911, Marshall.	(4).
100/1	<i>Fontinalis antipyretica</i> Hedw. (300) 1859, Bogg.	2, 4 — 8, 10 — 12, 15 — 18.
101/1	<i>Climacium dendroides</i> (Hedw.) Web. & Mohr (156) 1877, Lees.	1 — 4, 7, 9, 10, 13, 15, 16.
103/1	<i>Cryphaea heteromalla</i> (Hedw.) Mohr (157) 1877, Fowler.	(2), (11).
104/1	<i>Leucodon sciuroides</i> (Hedw.) Schwaegr. (301) 1877, Fowler.	2, 4, 7, 8, 10, 13 — 16.
106/1	<i>Pterogonium gracile</i> (Hedw.) Sm. (302) 1904, Hawley.	(10).
109/2	<i>Neckera crispa</i> Hedw. (303) 1879, Fowler.	(2), (13 — 16).
109/4	<i>N. complanata</i> (Hedw.) Hüben. (304) 1878, Lees.	1, 3, 4, 6 — 8, 10, 11, 13 — 16.
110/1	<i>Omalia trichomanoides</i> (Hedw.) B., S. & G. (305) 1877, Lees.	3, 4, 7, 8, 10, 11, 13, 15, 16.
111/1	<i>Thamnum alopecurum</i> (Hedw.) B., S. & G. (306) 1877, Lees.	4, 6 — 8, 10, 11, 13 — 16.

HYPSOBRYALES

118/1	<i>Leskea polycarpa</i> Hedw. (307) 1892, Larder.	4, 8, 10, 13.
122/3	<i>Anomodon viticulosus</i> (Hedw.) Hook. & Tayl. (106) 1878, Lees.	4, 8, 10, 15.
123/1	<i>Thuidium abietinum</i> (Hedw.) B., S. & G. (308) 1902, Stow.	15, 16.
123/3	<i>T. tamariscinum</i> (Hedw.) B., S. & G. (309) 1862, Peacock.	2 — 8, 10, 11, 13 — 16.
123/5	<i>T. philibertii</i> Limpr. (310) 1912, Marshall.	3, 11.
125/1	<i>Cratoneuron filicinum</i> (Hedw.) Spruce (104) 1876, Parsons.	2 — 8, 10 — 16.
	var. <i>fallax</i> (Brid.) Roth (105) 1900, Mason.	4, 7, 8, (15).
125/2	<i>C. commutatum</i> (Hedw.) Roth.	
	var. <i>commutatum</i> (311) 1877, Lees.	2 — 7, 15.
	var. <i>falcatum</i> (Brid.) Mönk. (312) 1899, Mason.	2, 4, 5, 7, 9, 13, 15.
	var. <i>virescens</i> (Schimp.) Rich & Wall. (398) 1963, Seaward.	13.
126/1	<i>Campylium stellatum</i> (Hedw.) J. Lange & C. Jens. (313) 1878, Lees.	1, 3, 5, 6, 8, 13, 15.
126/2	<i>C. protensum</i> (Brid.) Kindb. (314) 1898, Stow.	15.
126/3	<i>C. chrysophyllum</i> (Brid.) J. Lange (315) 1878, Fowler.	2 — 5, 7, 8, 10, 15.
126/4	<i>C. polygamum</i> (B., S. & G.) J. Lange & C. Jens. (316) 1911, Marshall.	4, 5, 9.
126/5	<i>C. elodes</i> (Lindb.) Kindb. (317) 1914, Marshall.	5, 8.
126/6	<i>C. calcareum</i> Crundw. & Nyh. (318) 1900, Stow.	3, 15.
127/1	<i>Leptodictyum riparium</i> (Hedw.) Warnst. (319) 1877, Lees.	1 — 4, 7 — 10, 14 — 18.
128/1	<i>Hygroamblystegium tenax</i> (Hedw.) Jenn. (103) 1898, Mason & Gasking.	3.
128/2	<i>H. fluviatile</i> (Hedw.) Loeske (100) 1880, Fowler.	(13), (14).
129/1	<i>Amblystegium serpens</i> (Hedw.) B., S. & G. (101) 1877, Lees.	1 — 10, 12 — 18.
129/2	<i>A. juratzkanum</i> Schimp. (102) 1912, Marshall.	4, 15.
129/3	<i>A. kochii</i> B., S. & G. (320) 1912, Marshall.	4.
129/4	<i>A. varium</i> (Hedw.) Lindb. (321) 1931, Allison.	4, 10.
131/1	<i>Drepanocladus aduncus</i> (Hedw.) Warnst.	
	var. <i>aduncus</i> (322) 1877, Lees.	1, 2, 4 — 7, 9, 10, 15, 16, 18.
	var. <i>kneiffii</i> (294) 1877, Lees.	1, 2, 6, 7, 9, 13, 16, 17.
131/2	<i>D. sendtneri</i> (Schimp.) Warnst. (324) 1959, Seaward.	5.
	var. <i>wilsonii</i> (Schimp. ex Lor.) Warnst. (323) 1899, Mason.	9.
131/3	<i>D. lycopodioides</i> (Brid.) Warnst. (325) 1903, Mason & Peacock.	5.
131/4	<i>D. fluitans</i> (Hedw.) Warnst.	
	var. <i>fluitans</i> (326) 1877, Lees.	1 — 3, 5, 7, 9, 10, 13, 15.
	var. <i>falcatus</i> (B., S. & G.) Warnst. (375) 1932, Allison.	1, 2, 3, 10.
131/5	<i>D. exannulatus</i> (B., S. & G.) Warnst.	
	var. <i>exannulatus</i> (327) 1897, Fowler.	1, 2, 5, 6, 9.
	var. <i>rotae</i> (De Not.) Wynne (376) 1902, Stow.	1, 2, 5.
131/6	<i>D. revolvens</i> (Turn.) Warnst.	
	var. <i>revolvens</i> (328) 1879, Fowler.	2, 5.
	var. <i>intermedius</i> (Lindb.) Rich. & Wall. (377) 1900, Gasking.	(16).
132/2	<i>Hygrohypnum luridum</i> (Hedw.) Jenn. (329) 1898, Preston.	(10), (15).
133/1	<i>Scorpidium scorpioides</i> (Hedw.) Limpr. (330) 1877, Lees.	3, 5.
134/1	<i>Acrocladium stramineum</i> (Brid.) Rich. & Wall. (331) 1898, Peacock & Davy.	2, 5.
134/3	<i>A. cordifolium</i> (Hedw.) Rich. & Wall. (332) 1878, Fowler.	1, 2, 4, 5, 9, 10, (12), 13.
134/4	<i>A. giganteum</i> (Schimp.) Rich. & Wall. (333) 1903, Mason & Peacock.	1, 2, 4, 5.
134/6	<i>A. cuspidatum</i> (Hedw.) Lindb. (334) 1857, Bogg.	1 — 11, 13 — 18.
	var. <i>caespitosum</i> Whitehead — 1899, Mason.	16.
135/1	<i>Isoetecium myurum</i> Brid. (335) 1877, Lees.	4, 7, 8, 10, 11, 15.
135/2	<i>I. myosuroides</i> Brid. (336) 1877, Fowler.	2 — 4, 7, 10, 11, 14, 15.
137/1	<i>Camptothecium sericeum</i> (Hedw.) Kindb. (338) 1877, Lees.	2 — 8, 10 — 18.
137/2	<i>C. lutescens</i> (Hedw.) B., S. & G. (149) 1877, Lees.	2, 4 — 16, 18.
138/1	<i>Brachythecium albicans</i> (Hedw.) B., S. & G. (124) 1878, Parsons.	1 — 6, 9 — 11, 13, 15 — 18.
138/2	<i>B. glareosum</i> (Spruce) B., S. & G. (123) 1877, Lees.	2, 4, 7, 11, 14.
138/4	<i>B. salebrosum</i> (Web. & Mohr) B., S. & G. (125) 1877, Lees.	7, (10), (15).
138/5	<i>B. mildeanum</i> (Schimp.) Milde (126) 1879, Lees.	7, (9), 14.
138/6	<i>B. rutabulum</i> (Hedw.) B., S. & G. (127) 1799, Young.	1 — 18.
138/7	<i>B. rivulare</i> B., S. & G. (339) 1912, Marshall.	4, 7, 10, 11, 15, 16.
138/11	<i>B. velutinum</i> (Hedw.) B., S. & G. (129) 1877, Lees.	1 — 18.
138/12	<i>B. populeum</i> (Hedw.) B., S. & G. (130) 1877, Lees.	4, 7, 8, 15.
138/13	<i>B. plumosum</i> (Hedw.) B., S. & G. (131) 1877, Lees.	7, (14).
140/1	<i>Cirriphyllum piliferum</i> (Hedw.) Grout (340) 1880, Fowler.	2 — 4, 6 — 8, 10, 13 — 16.
140/3	<i>C. crassinervium</i> (Tayl.) Loeske & Fleisch. (341) 1877, Lees.	3, 4, 7, 13 — 16.
141/1	<i>Eurhynchium striatum</i> (Hedw.) Schimp. (342) 1877, Lees.	1 — 8, 10, 11, 13 — 16.
141/4	<i>E. praelongum</i> (Hedw.) Hobk. (343) 1856, Bogg.	1 — 18.

141/5	<i>E. swartzii</i> (Turn.) Curn. (344) 1877, Lees.	2 — 4, 6 — 8, 10, 13 — 18.
141/7	<i>E. speciosum</i> (Brid.) Milde (345) 1911, Marshall.	4.
141/8	<i>E. riparioides</i> (Hedw.) Rich. (346) 1880, Fowler.	1 — 4, 6 — 10, 13 — 17.
141/10	<i>E. murale</i> (Hedw.) Milde (347) 1877, Lees.	2, 4, 7, 8, 10, 13 — 15.
141/11	<i>E. confertum</i> (Dicks.) Milde (348) 1877, Lees.	1, 3, 4, 7, 8, 10, 11, 13 — 16, 18.
141/12	<i>E. megapolitanum</i> (Bland.) Milde (349) 1893, Thornley.	9, 11.
142/1	<i>Rhynchostegiella pumila</i> (Wils.) E. F. Warb. (350) 1911, Marshall.	4, 11.
142/3	<i>R. teesdalei</i> (Sm.) Limpr. (409) 1965, Chandler	16.
142/4	<i>R. tenella</i> (Dicks.) Limpr. (351) 1877, Lees.	7, 15, 16.
145/1	<i>Entodon concinnus</i> (De Not.) Paris (158) 1901, Stow.	2, 3, 10, 14, 15.
146/1	<i>Pseudoscleropodium purum</i> (Hedw.) Fleisch. (132) 1877, Lees.	1 — 8, 10, 11, 13 — 16.
147/1	<i>Pleurozium schreberi</i> (Brid.) Mitt. (353) 1876, Parsons.	1 — 3, 5, 7, 10, 13, 15.
148/4	<i>Isopterygium elegans</i> (Hook.) Lindb. (354) 1877, Lees.	3, 4, 7, 10, 16.
149/1	<i>Plagiothecium latebricola</i> B., S. & G. (355) 1904, Hawley.	4, 10.
149/4—11	<i>P. denticulatum/sylvaticum</i> agg. (356/357) 1877, Lees.	1 — 4, 6 — 8, 10, 13 — 16.
	<i>P. denticulatum</i> (Hedw.) B., S. & G. (396) 1877, Lees.	4, 7, 11, 13, 15.
	<i>P. ruthei</i> Limpr. (395) 1915, Allison.	1 — 4.
	<i>P. curvifolium</i> Schlieph. ex Limpr. (394) 1919, Bullock,	3, 4, 7, 10, 13, 15, 16.
	<i>P. succulentum</i> (Wils.) Lindb. (400) 1959, Seaward.	6, 7, 10, 15.
	<i>P. sylvaticum</i> (Brid.) B., S. & G. (397) 1878, Lees.	4, 6, 7, 10, 15, 16.
149/12	<i>P. undulatum</i> (Hedw.) B., S. & G. (358) 1877, Lees.	2, 3, 7, 10, 13.
151/1	<i>Pylaisia polyantha</i> (Hedw.) B., S. & G. (359) 1856, Bogg.	8, (11).
154/1	<i>Hypnum cupressiforme</i> Hedw. (360) 1856, Bogg.	1 — 18.
	var. <i>resupinatum</i> (Wils.) Schimp. (361) 1877, Lees.	1 — 10, 13 — 17.
	var. <i>filiforme</i> Brid. (362) 1898, Stow.	(10), (13).
	var. <i>ericetorum</i> B., S. & G. (363) 1899, Mason.	2, 3, 5, 7, 10, 11, (13).
	var. <i>tectorum</i> B., S. & G. (408) 1966, Seaward.	2.
	var. <i>lacunosum</i> Brid. (364) 1878, Lees.	7, 9, 11, 15, 16.
154/7	<i>H. lindbergii</i> Mitt. (365) 1892, Peacock & Davy.	(2), 16.
156/1	<i>Ctenidium molluscum</i> (Hedw.) Mitt. (366) 1877, Lees.	1 — 5, 7 — 11, 13 — 16.
160/1	<i>Rhytidiadelphus triquetrus</i> (Hedw.) Warnst. (367) 1876, Parsons.	1 — 4, 6 — 11, 13 — 16.
160/2	<i>R. squarrosus</i> (Hedw.) Warnst. (368) 1877, Lees.	1 — 11, 13 — 16.
160/3	<i>R. loreus</i> (Hedw.) Warnst. (369) 1877, Lees.	7, (13).
161/1	<i>Hylocomium brevirostre</i> (Brid.) B., S. & G. (370) 1904, Hawley.	(10).
161/4	<i>H. splendens</i> (Hedw.) B., S. & G. (371) 1877, Lees.	1 — 4, 7 — 11, 13 — 15.

Unconfirmed records and/or adequate information not available for the following species:

Sphagnum rubellum Wils.
S. molle Sull.
Fissidens bambergeri Schimp, ex Milde.
Ditrichum heteromallum (Hedw.) Britt.
Seligeria recurvata (Hedw.) B., S. & G.
Gymnostomum calcareum Nees & Hornsch.
Orthodontium gracile Schwaegr. ex B., S. & G.
Anomobryum filiforme (Dicks.) Solms-Laub.
Bryum calophyllum R. Br.
B. pallescens Schleich. ex Schwaegr.
Orthotrichum stramineum Hornsch. ex Brid.

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Larder, J., MSS. and correspondence; in writer's possession.
Lees, F. A., notebooks, annotated copy of *Outline Flora*, annotated copy of *London Catalogue of British Mosses*; in possession of Dr. W. A. Sledge of Leeds, Cambridge University and the writer respectively.
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Stow, S. C., MSS., correspondence and annotated copy of *Handbook Catalogue of British Mosses* (1897); in writer's possession.

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 Cardiff, National Museum of Wales.
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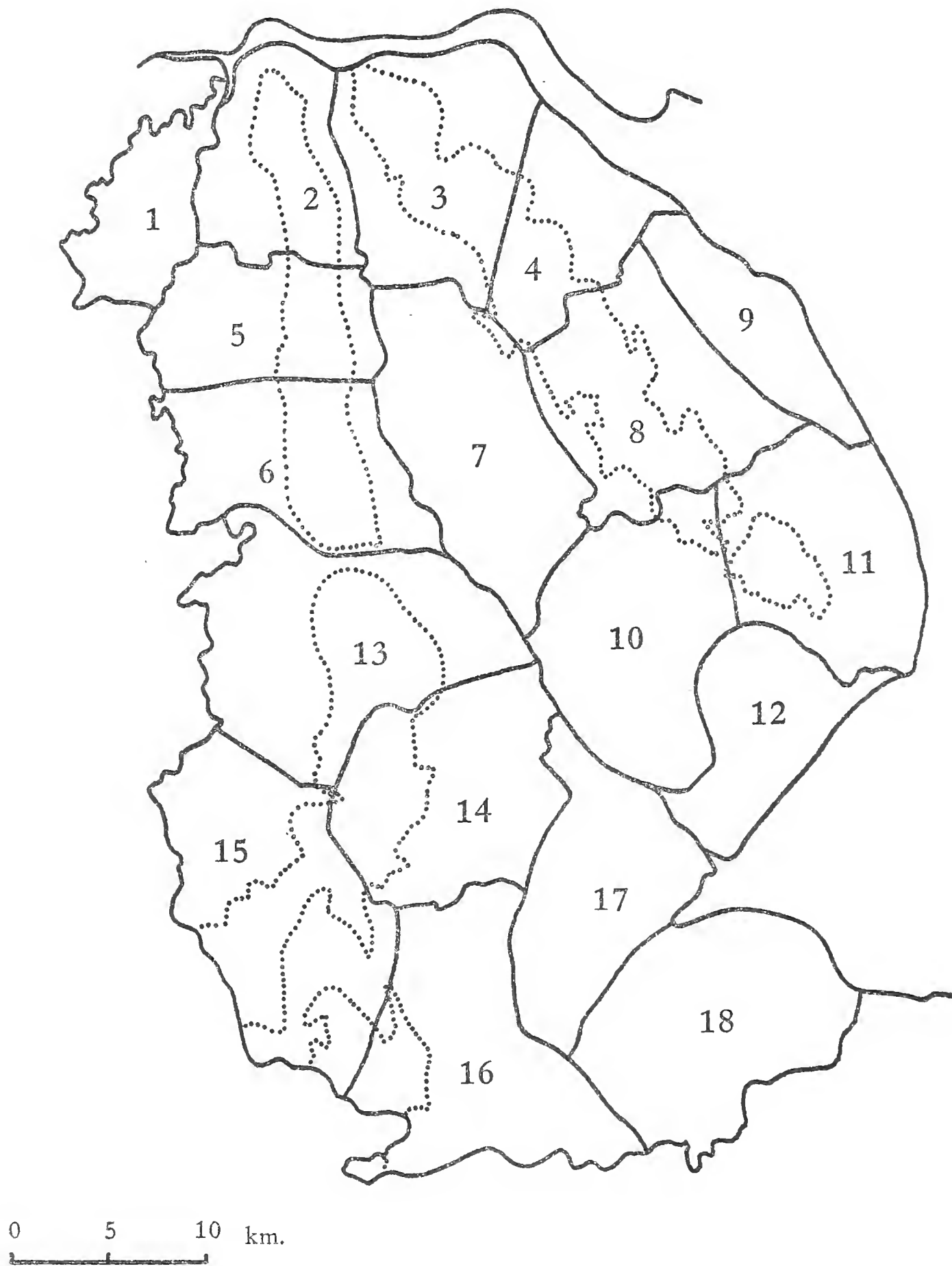
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THE NATURAL HISTORY DIVISIONS OF LINCOLNSHIRE



Vice-counties 54 and 53 are composed of divisions 1 — 12 and 13 — 18 respectively. Dotted outlines to the west enclose areas with limestone soils associated with the Lincolnshire Heights, and dotted outlines to the east enclose areas with chalky soils associated with the Lincolnshire Wolds.

PART II: HEPATICS

The hepatics have been less fortunate than the mosses in their treatment by Lincolnshire naturalists. Once again it was Lees who promoted hepatic recording at the turn of this century with the publication of his *Outline Flora* in 1892.

In 1902, Miss Stow produced a further check-list of Lincolnshire hepatics, based mainly on Lees' recordings. This list, with few alterations, was reproduced again in a paper by Reeves (1906); the compilation being attributed to Stow. Between this date and 1959 the publication of hepatic records has been very limited, despite the arduous activities of Allison between 1910 and 1953.

It has been possible over the past few years for me to examine Allison's collections and add to the local registers, but it is unfortunate that there is little herbarium material to substantiate the earlier recordings of Lees, Stow and Reeves; many of the latter workers' records must be regarded as suspect in the light of recent taxonomic revisions.

An approximate analysis of vice-county records (taking into account wherever possible the nomenclature revisions) over this period is as follows:

Recorder: Date:	Lees 1892	Reeves 1906	Wilson 1930	Wilson 1935	Paton 1965	Seaward 1969
V.C. 53	8	24	17	17	28	31
V.C. 54	25	38	40	41	58	60

The form of the following check-list is the same as that for the mosses (see p. 3 for further details), but in this instance the nomenclature and preceding index number are according to Paton (1965).

ANTHOCEROTALES

1/1 *Anthoceros punctatus* L. (410) 1930, Allison. 1, 4, 11.

MARCHANTIALES

5/1 *Conocephalum conicum* (L.) Underw. (411) 1856, Bogg. 2 — 5, 7 — 11, 13, 15, 16.
6/1 *Lunularia cruciata* (L.) Dum. (412) 1878, Lees. 2 — 4, 7, 8, 10, 13, 15, 16, 18.
7/1 *Preissia quadrata* (Scop.) Nees (413) 1913, Allison. 5.
8/1 *Marchantia polymorpha* L. (414) 1878, Lees. 1 — 5, 7, 8, 10, 13, 15 — 17.
10/5 *Riccia glauca* L. (415) 1904, Stow. 4, 9, 11, 13, 15.
10/8 *R. sorocarpa* Bisch. (416) 1879, Lees. 3, 4, 7, 13.
10/10 *R. fluitans* L. (417) 1905, Reeves. 4, 5, 9.
10/13 *R. crystallina* L. (418) 1905, Reeves. 7.
11/1 *Ricciocarpus natans* (L.) Corda (419) 1904, Stow. 3, 4, 7, 13, 15, 17.

METZGERIALES

12/2 *Riccardia multifida* (L.) Gray (420) 1877, Lees. 2, 4, 7.
12/3 *R. sinuata* (Dicks.) Trev. (421) 1912, Marshall. 3, 4, 15, 16.
12/6 *R. pinguis* (L.) Gray (422) 1877, Lees. 2 — 4, 7, 9.
14/1 *Pellia epiphylla* (L.) Corda (423) 1877, Goole Sc. Soc. 1 — 5, 7 — 11, 13 — 16.
14/3 *P. neesiana* (Gottsche) Limpr. (477) 1964, Chandler. 15.
14/4 *P. endiviifolia* Dicks. (424) 1890, Davy. 2 — 5, 7 — 11, 13 — 16.
15/1 *Metzgeria furcata* (L.) Dum. (425) 1877, Lees. 4, 7 — 9, 11, 13 — 16.
18/1 *Blasia pusilla* L. (426) 1879, Lees. 7.
20/1 *Fossombronia foveolata* Lindb. (427) 1934, Allison. 10.
20/8 *F. pusilla* (L.) Dum. (429) 1903, Stow. 4, 7, 13, 14, 16.

JUNGERMANNIALES

27/1	<i>Ptilidium ciliare</i> (L.) Hampe (430) 1877, Lees.	2, 3, 5, 7, 10, 13.
27/2	<i>P. pulcherrimum</i> (Weber) Hampe (431) 1912, Marshall.	4.
29/1	<i>Blepharostoma trichophyllum</i> (L.) Dum. (432) 1877, Lees.	7.
31/2	<i>Lepidozia reptans</i> (L.) Dum. (433) 1877, Lees.	5, 7, 10, 11, 13.
31/4	<i>L. setacea</i> (Weber) Mitt. (434) 1935, Allison.	5.
33/2	<i>Calypogeia muellerana</i> (Schiffn.) K. Müll. (476) 1959, Seaward.	7.
33/4	<i>C. fissa</i> (L.) Raddi (436) 1878, Fowler.	2, 3, 5, 7, 11, 15.
33/7	<i>C. arguta</i> Nees & Mont. (437) 1879, Lees.	5, 7, 8, 15.
34/1	<i>Lophozia ventricosa</i> (Dicks.) Dum. (438) 1898, Lees.	2, 7.
34/6	<i>L. excisa</i> (Dicks.) Dum. (440) 1914, Reader.	1, 10.
34/11	<i>L. bicrenata</i> (Schmid.) Dum. (441) 1945, Jones.	5.
35/1	<i>Leiocolea turbinata</i> (Raddi) Buch (442) 1912, Allison.	4, 7, 9.
36/3	<i>Barbilophozia attenuata</i> (Mart.) Loeske (443) 1932, Allison.	2, 7.
36/8	<i>B. barbata</i> (Schmid.) Loeske (444) 1877, Lees.	7.
37/3	<i>Tritomaria exsectiformis</i> (Breidl.) Schiffn. (445) 1936, Allison.	7.
44/1	<i>Gymnocolea inflata</i> (Huds.) Dum. (446) 1877, Lees.	1, 2, 5, 7, 13.
46/8	<i>Solenostoma crenulatum</i> (Sm.) Mitt. (447) 1879, Lees.	1, 5, 7, 8.
48/2	<i>Nardia scalaris</i> (Schräd.) Gray (448) 1892, Lees. 5, S. Lincs. — <i>loc. non cit.</i> in <i>Outline Flora</i> .	
56/2	<i>Plagiochila asplenoides</i> (L.) Dum.	
	var. <i>asplenoides</i> (451) 1879, Lees.	2, 5, 7, 8, 11, 13, 15, 16.
	(Some of these records should be referred to next var.).	
	var. <i>major</i> Nees (475) 1938, Allison.	4, 7, 10, 15, 16.
57/1	<i>Lophocolea bidentata</i> (L.) Dum. (452) 1877, Lees.	1 — 8, 10, 11, 13 — 16.
57/2	<i>L. cuspidata</i> (Ness) Limpr. (453) 1930, Holderness.	1 — 3, 7, 10, 11, 13 — 16.
57/3	<i>L. heterophylla</i> (Schräd.) Dum. (454) 1878, Fowler.	1 — 4, 7, 8, 10, 11, 13, 15, 16, 18.
58/1	<i>Chiloscyphus polyanthos</i> (L.) Corda (455) 1899, Cordeaux.	8, 10.
58/2	<i>C. pallescens</i> (Ehrh.) Dum. (456) 1931, Allison.	10.
62/9	<i>Cephalozia starkei</i> (Funck) Schiffn. (457) 1898, Stow.	2, 11, 13.
63/2	<i>Cephalozia bicuspidata</i> (L.) Dum. (458) 1877, Lees.	1, 3 — 5, 7, 8, 10, 13, 15.
	var. <i>lammersiana</i> (Hüb.) Breidl. (459) 1898, Lees.	7, 13.
63/5	<i>C. connivens</i> (Dicks.) Lindb. (460) 1914, Reader.	1, 5, 10.
63/7	<i>C. media</i> Lindb. (461) 1948, Rose.	1.
66/1	<i>Odontoschisma sphagni</i> (Dicks.) Dum. (462) 1877, Lees.	2, 3, 7.
	S. Lincs. — <i>loc. non cit.</i> in <i>Outline Flora</i> .	
69/1	<i>Diplophyllum albicans</i> (L.) Dum. (463) 1877, Lees.	2, 7, 8, 10, 13.
70/8	<i>Scapania irrigua</i> (Nees) Dum. (464) 1905, Reeves.	5, 7.
70/11	<i>S. aspera</i> Bernet (465) 1954, Wallace.	14.
70/13	<i>S. nemorea</i> (L.) Grolle (467) 1898, Lees.	2, 7.
70/16	<i>S. undulata</i> (L.) Dum. (468) 1932, Allison.	2, 3.
70/20	<i>S. compacta</i> (Roth) Dum. (469) 1953, Lobley.	2.
71/1	<i>Radula complanata</i> (L.) Dum. (470) 1878, Lees.	3 — 5, 7, 8, 11, 13 — 15.
73/3	<i>Porcella platyphylla</i> (L.) Lindb. (471) 1877, Lees.	2 — 5, 7, 8, 15, 16.
82/1	<i>Frullania tamarisci</i> (L.) Dum. (473) 1879, Goole Sc. Soc.	2, 11.
82/5	<i>F. dilatata</i> (L.) Dum. (474) 1877, Goole Sc. Soc.	2 — 4, 7, 11, 13 — 16.

Unconfirmed records and/or adequate information not available for the following species:

Fossombronia caespitiformis De Not.
Calypogeia trichomanis (L.) Corda emend. Buch.
Lophozia alpestris (Schleich. ex Weber) Evans
Marsupella emarginata (Ehrh.) Dum.
Mylia taylori (Hook.) Gray
Scapania gracilis (Lindb.) Kaal.
Lejeunea cavifolia (Ehrh.) Lindb.

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